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ESTIMATED U.S. PETROLEUM BALANCE

SUMMARY

Although they still remain below last year's level for the first eleven months, domestic petroleum deliveries increased 238 thousand B/D (1.5%) in November. As in most of 1985, gasoline and kerosine jet fuel deliveries in November were higher than last year, while recent strength in distillate demand has brought distillate deliveries on a cumulative basis to about 1984's level. Thus, it is the continued decline in residual fuel oil demand that has caused the overall decline in domestic deliveries, and year-to-date results excluding that product reflect continued improvement, though slight, in delivery levels. But residual fuel deliveries have, since mid-year, experienced generally-moderating rates of decline; for the past two months combined, in fact, a slight year-to-year gain was experienced. It is this change in residual fuel oil deliveries that is largely responsible for the November increase in total petroleum deliveries.

Total U.S. crude oil production suffered a 78 thousand B/D decline in November, though Alaskan production was up slightly. In contrast to earlier months of 1985, the November increase in inventories of about six million barrels was about normal for this time of year and about the same as last year. As a direct consequence, since domestic supply was up somewhat less than the increase in total products supplied, imports increased slightly from year-ago levels.

PRODUCTS SUPPLIED[1]

Gasoline

DELIVERIES ONLY MINIMALLY ABOVE LAST YEAR'S LEVEL.

Gasoline deliveries rose 16 thousand B/D (0.2%) compared with year-earlier levels, a rate of increase somewhat below those experienced over the past several months. When adjusted for the estimated 50 thousand B/D increase resulting from blenders' volume not part of last year's reporting universe, moreover, a year-to-year decrease of about 34 thousand B/D (0.5%) results.

Gasoline prices rose about a penny. Adjusted for inflation, gasoline prices are slightly below last November's and more than 30% below the March 1981 high. Estimated real disposable personal income was down slightly in the third quarter compared with the first half level. The recent lack of buoyancy in gasoline demand, given little change in gasoline prices, is likely related to unimpressive performance of this economic indicator.

Unleaded's share of the total gasoline market rose to almost 67%, the highest level ever reached. This share is almost two percentage points higher than October's level and roughly 4 percentage points above the year-earlier share.

Distillates

UP 2% OVER LAST NOVEMBER'S LEVEL.

Distillate deliveries rose 48 thousand B/D (1.7%) compared with last November's. Weather was roughly 10% warmer than last year, lowering heating oil demand by an estimated 60 thousand B/D. Rail and truck traffic are estimated to have experienced only minor year-to-year changes in November, likely too insignificant to have caused a meaningful impact on distillate deliveries. As a result, we believe that filling of non-primary storage — by perhaps 100 thousand B/D more than last year — was the major reason for November's distillate increase.

Residual Fuel Oil

ABOUT 2% BELOW LAST YEAR.

Residual fuel oil deliveries were 25 thousand B/D (1.8%) lower than last November's and, for the year to date, were 192 thousand B/D, almost 14%, below the corresponding period last year.

Resid prices recovered somewhat in November; in October, the increase in resid deliveries is believed to have been in part the result of lower prices for residual fuel oil. Natural gas prices, on the other hand, generally continued their overall decline in November, often-direction-setting prices on spot markets reaching levels some 30% below early-1985's. These developments would normally have had a rather unfavorable impact on

resid demand. However, uncertainty prevailing in natural gas markets since the institution of new regulations on November 1st, and the difficulty reportedly experienced by some companies in obtaining transported supplies, seem to have resulted in some dual-fuel-capability users' energy needs being channeled into residual fuel oil markets. This factor is likely to have made itself particularly felt in the industrial sector of the natural gas market. As a result of that sector's likely swing to resid, November's overall year-to-year decline in deliveries was minimal.

Despite the fact that electricity generation was up about 2%, residual fuel oil purchases by electric utilities in November was likely still below year-earlier levels by 75-100 thousand B/D. This year-to-year decline is a significantly smaller decrease than the 150-200 thousand B/D experienced several months ago, with the difference primarily attributable to the more favorable price relationships in recent months, although resid prices rose somewhat in November.

While relative price trends have often resulted in short-to-intermediate-term fluctuations in the electric utilities' resid purchases, over the longer term petroleum (mainly residual fuel oil) has continued to lose market share as an energy source in that sector. For eight months of 1985, for example, its share fell about one percentage point from a year earlier to just over 4%, while natural gas held on to a roughly 12% share. A major reason for petroleum's downtrend is the continued rise in coal's share, an energy input that captured almost 55% of the electric utility market for the eight-month period, more than one percentage point above the similar 1984 period and about 2½ percentage points higher than for the corresponding period two years ago. Higher use of nuclear fuel also raised that energy source's share by more than two percentage points from year-earlier levels — to over 15% of total input — and roughly three percentage points, when compared with the corresponding 1983 period.

Kerosine Jet Fuel

UP 13 %.

Kerosine jet fuel deliveries rose 124 thousand (13.4%) B/D over last November's level, again exceeding the 1 million B/D mark, but led last year's delivery levels for the year to date by only 2½%.

"Miles flown" levels, for the 9 months for which data are available, on average were about 4% ahead of the corresponding period in 1984, though the third quarter apparently experienced larger increases. Recent fare incentives are likely to have pushed air traffic to even higher levels since then.

Cumulatively, there continues to be a gap of about two percentage points between the rate of "miles flown" increases and the upward rise in kerosine jet fuel demand, a reflection of persistent emphasis on fuel efficiency improvements.

Other Oils

UP AN ESTIMATED 4% OVER LAST NOVEMBER'S LEVEL.

Deliveries of "other oils" are estimated to have exceeded last year's by about 151 thousand B/D (4.1%) in November.

With overall economic activity on an uptrend during the third quarter, strength may have spread to the chemical sector, though initial sales reports had indicated some continued year-to-year deterioration. We expect deliveries of petrochemicals, up more than 20% over last year in September, to have experienced continued increases during the October/November period over last year's relatively low levels, perhaps on the order of 50 thousand B/D.

Demand for liquefied petroleum gases strengthened in November, and prices, already up considerably from earlier-month levels at the beginning of November, continued to rise. Increases appear to have been especially pronounced in demand for propane, which benefited from its versatile use as a space heating fuel, in chemical applications, and in crop-drying in this year's drawn-out season. Propane deliveries were almost 9% higher in September than last year, and year-to-year increases are likely to have continued into November. While November was warmer than normal for the country as a whole, cold temperatures prevailed in most of the regions where propane is used as a heating fuel. Butane, up more than 20% in September and 12% for the first 9 months of the year to date, may have been similarly affected; deliveries in November are estimated to have been up 15-20% over last year. As a result of increased demand for both propane and butane, overall deliveries of liquefied petroleum gases were up almost 100 thousand B/D in September compared with last year and are likely to have experienced continued improvement into November. Thus, LPG increases are estimated to have been responsible for about two-thirds of the estimated total increase in "other oils" deliveries.

Road oil and asphalt demand was up about 4% for the first 9 months of the year; one would have expected the previously-delayed release of federal fund allocations for highway construction and repair earlier this year to have lifted existing demand more substantially, however. The recent allocation of current fiscal year funds may have induced some additional buying, and the November delivery increase may indeed have been larger than the 4% increase previously experienced.

Lubricant sales were down about 25 thousand B/D (16%) in September and roughly 15 thousand B/D for the year-to-date, and a 15-20 thousand B/D decrease is estimated to have occurred in November.

(In millions of B/D)	NOVEMBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1985	1984	% Change	1985	1984	% Change
—Total domestic products supplied	15.9	15.6	1.5	15.6	15.8	(0.8)
—Motor gasoline supplied	6.8	6.8	0.2	6.8	6.7	1.5
—Distillate fuel oil supplied	2.9	2.8	1.7	2.8	2.8	(0.4)
—Residual fuel oil supplied	1.3	1.4	(1.8)	1.2	1.4	(13.9)

SUPPLY [1]

Total supply was 134 thousand B/D (0.6%) above last year's because of higher total domestic supply (98 thousand B/D) and a slight increase in imports (36 thousand B/D).

Production

DOWN ABOUT 1%.

Domestic crude oil production fell 78 thousand B/D (0.9%) in November, in good part because of hurricane-related disruptions in the lower 48; a small net increase in Alaskan output was more than offset by a decrease in lower 48 production. Output in Alaska was helped by start of production at Milne Point and higher Kuparuk production, but Cook Inlet production is estimated to have fallen sizably.

Imports

ROUGHLY 1% ABOVE LAST YEAR'S.

Total imports were about 36 thousand B/D (0.7%) higher than last year. Gasoline imports (including blending components) rose an estimated 100 thousand B/D over year-earlier levels, but, for the year to date, these imports are up only 50-60 thousand B/D. November distillate imports stayed at the roughly 315 thousand B/D level experienced last year, but, for the year to date, are about 85 thousand B/D below year-earlier levels.

Total imports have been lower this year than last as a direct consequence of the difference between the inventory drawdown in 1985 and the increase in 1984. However, with inventory behavior this November essentially the same as last, November's total petroleum imports increased as a result of the increase in demand.

Mexico continued to be the top petroleum supplier to the U.S. in September, followed by Venezuela, Canada, the United Kingdom, and Nigeria. OPEC's share of total imports has been in the 36-37% range for the past several months reported, some 3-4 percentage points below year-earlier levels.

Inventories

ROSE IN LINE WITH HISTORICAL EXPERIENCE.

Total inventories rose about 6 million barrels from October levels, about in line with historical inventory movement at this time of year. Distillate inventories rose almost 13 million barrels in November, several times the increase usually experienced in that month, but inventories of "other oils" fell substantially. November gasoline inventories fell about 1 million barrels from October levels; they normally rise some 5-6 million barrels during November.

Inventories of natural gas liquids continued to fall in October, mainly as a result of a decline in propane inventories. With demand for most liquefied petroleum gases estimated to be higher in November than last year, some year-to-year declines in inventories may have continued, though flow from the damaged Mont Belvieu facility reduced the amount of product moved during the month.

Operations

UTILIZATION RATE EXCEEDED 80%.

With input to crude oil distillation units rising about 270 thousand B/D and operable capacity down almost 240 thousand B/D, utilization rose about 3 percentage points to more than 80%. If the estimated 1.2 million B/D of idle but operable capacity is excluded from the computation, the rate of utilization rises to almost 87%.

With distillate output topping 3 million barrels per day in three out of four of November's full-week reporting periods—and production during the last full reporting week of that month at almost 3.3 million B/D—total distillate output averaged about 3.1 million B/D in November, roughly 275 thousand B/D higher than last year.

(In millions of B/D)	NOVEMBER ESTIMATES			YEAR-TO-DATE ESTIMATES		
	1985	1984	% Change	1985	1984	% Change
—Total supply	16.8	16.7	0.8	16.1	16.6	(2.7)
—Crude production[2]	8.9	9.0	(0.9)	8.9	8.9	0.3
—Crude oil imports[3,4]	3.5	3.4	3.7	3.0	3.3	(7.8)
—Product imports	1.9	2.0	(4.3)	1.8	2.0	(12.5)

1/ Total supply, i.e., production plus imports adjusted for net stock change is equal to total products supplied from primary storage. Total products supplied from primary storage less exports is equal to total domestic products supplied. Information contained in this report is derived from information published in the API Weekly Bulletin and is based on historical analysis of the industry. All data reflect the most current information available to the API and include all previously published revisions.

2/ Includes lease condensate.

3/ Beginning with January 1977, the U.S. Department of Energy began reporting crude oil imports as of the date of importation. Previously, this data, with the exception of Canadian crude imports, was reported as of the date it was received at the refinery. This change may affect both the level of crude oil imports and crude oil stocks. API estimates of these data may, therefore, differ slightly from those of the U.S. Department of Energy.

4/ API data do not include crude oil imported for the Strategic Petroleum Reserve (SPR) nor crude oil stocks held in the SPR (according to the U.S. Department of Energy, the SPR held approximately 491 million barrels as of November 30, 1985.

ESTIMATED UNITED STATES PETROLEUM BALANCE

(Daily Average in Thousands of 42 Gallon Barrels)

Products Supplied/Supply From Primary Storage	NOVEMBER			YEAR-TO-DATE		
	1985[1]	1984[2]	% Change	1985[3R]	1984[2]	% Change
Products Supplied						
Total motor gasoline	6,816	6,800	0.2	6,806	6,705	1.5
Finished leaded motor gasoline*	2,276	2,555	(10.9)	2,433	2,734	(11.0)
Finished unleaded motor gasoline*	4,540	4,245	6.9	4,373	3,971	10.1
Naphtha-jet	215	234	(8.0)	215	226	(4.9)
Kerosine-jet	1,048	924	13.4	968	944	2.5
Distillate fuel oil	2,853	2,837	1.7	2,833	2,843	(0.4)
Residual fuel oil	1,329	1,351	(1.6)	1,194	1,386	(13.9)
All other oils[4]	3,536	3,705	4.1	3,859	3,855	0.1
Reclassified[5]	- 221	- 210	(5.3)	- 235	- 199	18.1
Total domestic products supplied	15,816	15,847	(.2)	15,640	15,760	(0.8)
Exports	794	834	(10.0)	743	697	6.6
Total products supplied	16,606	16,681	0.8	16,383	16,457	(0.4)
Supply						
Domestic production						
Crude oil[6]	8,618	8,879	(2.9)	8,902	8,877	0.3
Natural gas liquids	1,584	1,665	(4.8)	1,609	1,628	(1.2)
Other supply	1,147	887	29.3	830	777	6.8
Total domestic supply	11,349	11,431	(0.7)	11,340	11,282	0.6
Imports	10/	10/		10/	10/	
Crude oil, total	3,677	3,864	(5)	3,006	3,259	(7.8)
Canadian	496	349	42.1	476	335	42.1
Other	3,181	3,515	(9.5)	2,530	2,924	(13.5)
Products, total	1,581	1,884	(16.1)	1,778	2,031	(12.5)
Residual fuel oil	473	661	(28.4)	491	686	(28.4)
Other	1,108	1,223	(9.4)	1,287	1,345	(4.3)
Total imports	5,258	5,748	(8.5)	4,784	5,290	(9.6)
Total supply	16,607	17,179	(3.3)	16,124	16,572	(2.7)
Stock change, all oils	+ 1	- 498	XXXX	+ 259	+ 115	XXXX
Refinery Operations						
Input to crude oil distillation units	12,373	12,236	1.1	12,427	12,239	(0.9)
Operable capacity	15,618	15,835	(1.4)	15,665	16,060	(2.5)
Refinery utilization (%)[8]	80.1	77.8	3.0	77.6	76.2	1.6
Crude oil runs	12,353	12,198	1.3	11,978	12,071	(0.8)

Stocks (millions bbls.)	1985		1984[7]	% Change from	
				Previous Month	Year Ago
Crude oil[10]	340.0	351.4	369.0		
Unfinished oils	110.8	107.3	113.8	0.4	(7.8)
Total motor gasoline**	218.5	218.0	250.1	1.6	4.0
Finished leaded motor gasoline*	99.1	94.1	98.4	(0.6)	(10.4)
Finished unleaded motor gasoline*	107.4	108.1	140.0	1.4	(17.3)
Naphtha-jet	6.1	6.4	6.5	(0.6)	(2.5)
Kerosine-jet	38.1	36.3	39.4	(1.6)	(3.1)
Distillate fuel oil	130.9	126.9	161.0	4.4	(9.8)
Residual fuel oil	85.4	89.0	87.0	3.2	(14.5)
All other oils	130.3	128.5	171.1	(4.3)	0.9
Total all oils	1,065.1	1,065.1	1,113.9	0.0	(12.3)

1. Based on API estimated data corrected for monthly bias.
2. Source: U.S. Department of Energy.
3. Source: January-September, U.S. Department of Energy (October-November, API).
4. Includes crude losses.
5. Beginning with January 1985, U.S. Department of Energy began using a new data collection system which necessitated a method to ascertain the amount of product reclassified during the processing phase. Similar historical figures could not be developed. Reclassified figures are subtracted from total domestic products supplied.
6. Includes lease condensate.
7. Includes Unaccounted for crude oil, Refinery input or other transactions and Processing gain.
8. Represents "Input to crude oil distillation units" as a percent of "Operable capacity".
9. Derived by annualizing API weekly crude data.
10. Data do not include oil reported for the Strategic Petroleum Reserve (SPR) but crude oil stocks held in the SPR.
R. Revised.
* Included in motor gasoline.
** Includes finished leaded, finished unleaded, and motor gasoline blending components stocks.